

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET

(pursuant to NAC 445A.236)

Permittee Name: Maryland Villas LLC
818 W. Brooks Avenue
Las Vegas, NV 89030

Permit Number: NV0023043

Location: Maryland Villas Apartment Complex
Northeast Corner of Maryland Parkway and Wilson Avenue
Las Vegas, Clark County, NV 89101

Latitude: 36° 10' 30"N,
Longitude: 115° 07' 45"W
Township 20S, Range 61E, Section 26

General:

Maryland Villas is an apartment complex housing development in Las Vegas, Clark County, Nevada. The site is approximately 5 acres in size. From the western edge of the property (bound by Maryland Parkway), the site slopes to the east. The elevation drop from west to east is 60 feet. During initial grading and foundation work, near surface groundwater was encountered. A series of dewatering trenches (French drains containing perforated pipes) were installed to convey water from the site. The trenches drain to an inspection manhole, 6 feet in diameter and 8 feet deep, located below grade. Water is discharged from the catchment area via gravity to a sub-grade pipeline connected to the Clark County stormdrain system. The water is discharged to the Las Vegas Wash via the stormdrain system.

Original design of the Maryland Villas discharge system determined a maximum flow of 50 gallons per minute (gpm). Flow rates were to be measured by visual inspection of a flow weir within the inspection manhole. Because of NPDES permit requirements in the Code of Federal Regulations (CFR), the Division required the Permittee to install a flow measuring device. In August 2006, the Permittee installed an ultrasonic flow meter. Flow measurement reported in Discharge Monitoring Reports (DMRs) submitted after August 2006, indicate the actual flows of drained groundwater to the Clark County stormdrain system are much higher than 50 gpm, and have been as high as 167 gpm. The Permittee has requested a modification of the existing permit to reflect the higher flow of drained groundwater to the Las Vegas Wash. The modification does not affect the permit expiration date of December 1, 2009.

Discharge Flow and Characteristics

During the period from November 2006 to May 2007, the Permittee has been in exceedance of flow limits (Permit Limit = 0.072 MGD, 50 gpm). DMR data submitted during that period indicate the following flow rates.

Date	Reported Flow Rate (MGD)	Gallons Per Minute
November 2006	0.24	167
February 2007	0.18	125

May 2007	0.15	104
----------	------	-----

During the period of the existing permit, there have been no exceedences of permit water quality limits. Reported water quality characteristics since the 2003 are given below:

Parameter	Permit Limit	Average	Maximum	Minimum
pH (Standard Units)	6.5 – 9.0	7.45	7.92	6.9
Inorganic Nitrogen (mg/l)	Monitor & Report	3.37	4	2
TDS (mg/l)	Monitor & Report	1367	1520	1100
TPH (mg/l)	Monitor & Report	4.68	24	<0.25

TDS = Total Dissolved Solids

TPH = Total Petroleum Hydrocarbons

Additionally, trace amounts of Volatile Organic Compounds (VOCs) were detected:

Date Detected	Parameter	Concentration (µg/l)	Aquatic Life Water Quality Criteria ⁽¹⁾ (µg/l)	Drinking Water Standard ⁽²⁾ (µg/l)
January 2003	1,2,4-Trimethylbenzene	7	None Listed	None Listed
	1,3,5-Trimethylbenzene	8.1	None Listed	None Listed
May 2006	Chloroform	6.2	None Listed	80
May, 2007	Bromodichloromethane	1.6	None Listed	80
	Dibromochloromethane	3.3	None Listed	80

(1) USEPA National Recommended Water Quality Criteria, 2004

(2) USEPA 2004 Edition of the Drinking Water Standards and Health Advisories

It is believed that the high TPH concentration (August 2005) was due to clandestine dumping of oil or gasoline into the collection vault. TPH has been below detection levels since that time. The VOCs identified were only slightly above the detection levels (1.0 or 5.0 µg/l), and are not indicative of a spill or impingement of a hydrocarbon plume.

Receiving Water Characteristics:

The dewatering system discharges into a Clark County stormdrain inlet, which eventually discharges to the Upper Las Vegas Wash. Water quality standards for the Upper Las Vegas Wash are specified in NAC 445A.199. The requirements to maintain existing higher quality waters apply.

Proposed Effluent Limitations and Special Conditions:

The Maryland Villas discharge is limited and monitored according to the following:

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30-Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD	Monitor & Report	0.40	Continuous (Record Monthly, Report Quarterly)	Flow Meter
TDS, mg/l	1900		Quarterly	Discrete
Total Inorganic Nitrogen, mg/L	20		Quarterly	Discrete
pH, Standard Units	6.5 – 9.0		Quarterly	Discrete
TPH, mg/L ¹	1.0		Semi-Annually ²	Discrete
Volatile Organic Compounds (VOC and MTBE), µg/L	Monitor & Report		Semi-Annually ²	Discrete

1. Report diesel and gasoline range fractions.
2. Semi-Annual sampling will be performed in the second and fourth quarters, and results will be submitted with the second and fourth quarter DMRs.

Rationale for Permit Requirements:

The monitoring requirements for the site are consistent with the requirements for maintaining higher water quality, as stated in NAC445A.199. Because the observed discharge of intercepted groundwater is much higher than expected from the design criteria, more frequent monitoring shall be required. Monitoring of groundwater quality during the construction and early operation phases of the system has shown that the groundwater collected from the facility does not contain significant amounts of phosphorus or ammonia; these parameters will not be monitored. The Permittee is required to monitor the discharge on a quarterly and semi-annual basis to ensure that the receiving water (Las Vegas Wash) is not degraded from dewatering at the Maryland Villas site.

Schedule of Compliance:

The Permittee shall achieve compliance with the NPDES permit on issuance.

Procedures for Public Comment:

The Notice of the Division's intent to issue an NPDES permit authorizing this facility to discharge into the stormdrain for remainder of the permit period, subject to the conditions contained within the permit, is being sent to the **Las Vegas Review-Journal** for publication. The Notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The

deadline date and time by which all comments are to be submitted (via postmarked mail or time-stamped faxes, e-mails, or hand-delivered items) to the Division is **December 5, 2007 by 5:00 P.M.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator or any interested agency, person or group of persons.

The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to modify the proposed NPDES discharge permit for a period of five (5) years

Prepared by: Janine O. Hartley
Staff Engineer II
September 2007